

Patent Abstracts of Japan

PUBLICATION NUMBER : 05150992
PUBLICATION DATE : 18-06-93

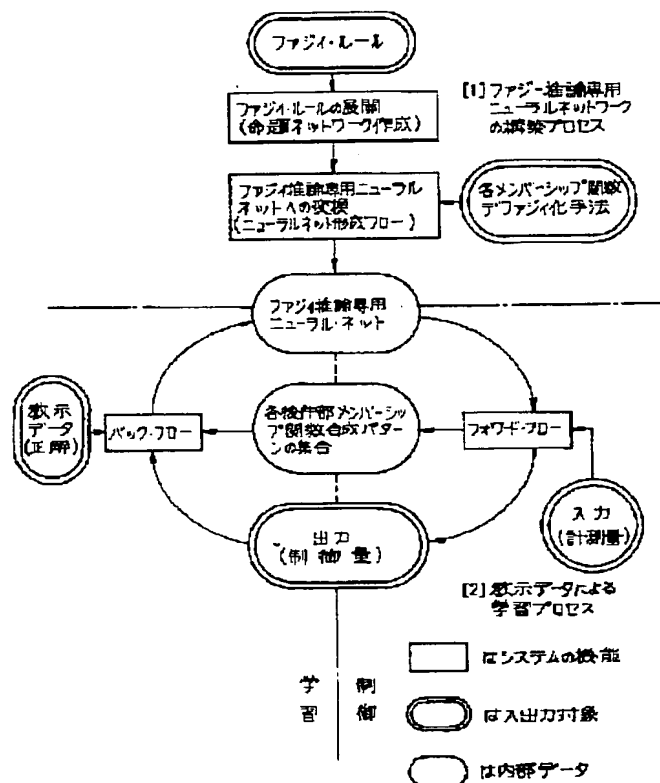
APPLICATION DATE : 26-11-91
APPLICATION NUMBER : 03311034

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INT.CL. : G06F 9/44 G06F 15/18

TITLE : AUTOMATIC DEVELOPING METHOD
OF FUZZY INFERENCE TO NEURAL
NETWORK



ABSTRACT : PURPOSE: To provide the improvement of maintainability, that of the convergence capability of learning, and the reduction of learning time. and to provide the developing method of fuzzy inference to output a learning result by making easy to interpret to a neural network.

CONSTITUTION: Thus method is composed of a neural network formation first process consisting of an input unit layer in which the set of a fuzzy rule including the antecedent part connecting an input fuzzy equation with an operator and the consequent part of an output fuzzy equation is hierarchically disassembled and connected in unit of fuzzy equation, a fuzzy rule antecedent part unit layer, and a fuzzy rule consequent part unit layer, and a neural network formation second process for fuzzy inference of hierarchical structure including an input layer in accordance with an input signal, each membership function layer for the antecedent and consequent parts for each membership function expression, a fuzzy rule layer consisting of the antecedent part unit layer and the consequent part unit layer generated in the first process, and a defuzzy making layer consisting of a center of gravity calculation part for plural neuron unit output to perform the synthesizing processing of the inference result by the output of the consequent part unit layer and that of the membership function of the consequent part.

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